PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES INSTALLATION OF VIDEO DETECTION CAMERAS TO REPLACE THE EXISTING LOOP DETECTORS AT THE INTERSECTION OF MD 528 (PHILADELPHIA AVENUE) AND 15TH STREET IN WORCESTER COUNTY. THE EXISTING CABINET IS TO BE REPLACED WITH A NEW NEMA 6 BASE MOUNTED CABINET, MD 528 (PHILADELPHIA AVENUE) IS ASSUMED TO RUN IN THE NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FIVE PHASE, SEMI TRAFFIC-ACTUATED MODE, WITH THE MD 528 APPROACHES RUNNING CONCURRENTLY. THERE IS AN EXCLUSIVE /PERMISSIVE LEFT TURN PHASE FOR NORTHBOUND MD 528. THE 15TH STREET APPROACHES OPERATE AS A "SPLIT PHASE". THERE IS AN ALTERNATE PEDESTRIAN PHASE ACROSS THE SOUTH LEG OF MD 528.

AN EMERGENCY PRE-EMPTION PHASE IS PROVIDED FOR THE FIRE HOUSE LOCATED IN THE SOUTHWEST CORNER OF THE INTERSECTION. EMERGENCY PRE-EMPTION WILL STOP THE NORTHBOUND TRAFFIC SOUTH OF THE FIREHOUSE. THE NORTHBOUND LEFT TURN AND THRU MOVEMENT FOR MD 528 WILL OPERATE TOGETHER WITH ALL OTHER MOVEMENTS SHOWING RED INDICATIONS AND THE ILLUMINATION OF A "NO RIGHT TURN" FIBER OPTIC SIGN FOR EASTOUND 15TH STREET.

EQUIPMENT LIST FOR CONTRACT NO. AX1395185

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

DESCRIPTION

MAINTENANCE OF TRAFFIC

VIDEO DETECTION CAMERA & CABLE

INSTALL CONTROLLER AND CABINET - BASE MOUNT

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

QUANTITY UNIT

* QUANTITY IS INCLUDED ON SHEET 2 0FG.

EA

EΑ

ITEM

1001

8007

8020

| 9041/9044 1 EA NEMA 6 CABINET WITH MASTER/ LOCAL AND POLARA AF 9086 1 EA (UPDATED) VIDEO DETECTION INTERFACE EQUIPMENT: | 9 | <u> </u> |
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PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. GENE COFIELL ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: ((410) 677-4040

MR. JAMES R. WRIGHT ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (410) 677-4010

MR. BRUCE W. POOLE UTILITY ENGINEER PHONE: (410) 677-4082

MR. RICHARD L. DAFF, SR CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

MR. ED RODENHIZER SUPERVISOR, SIGNAL OPERATIONS PHONE: 410-787-7650

MR. JOE MANNING SIGNAL TECHNICIAN- DISTRICT 1 PHONE: 410-677-4056

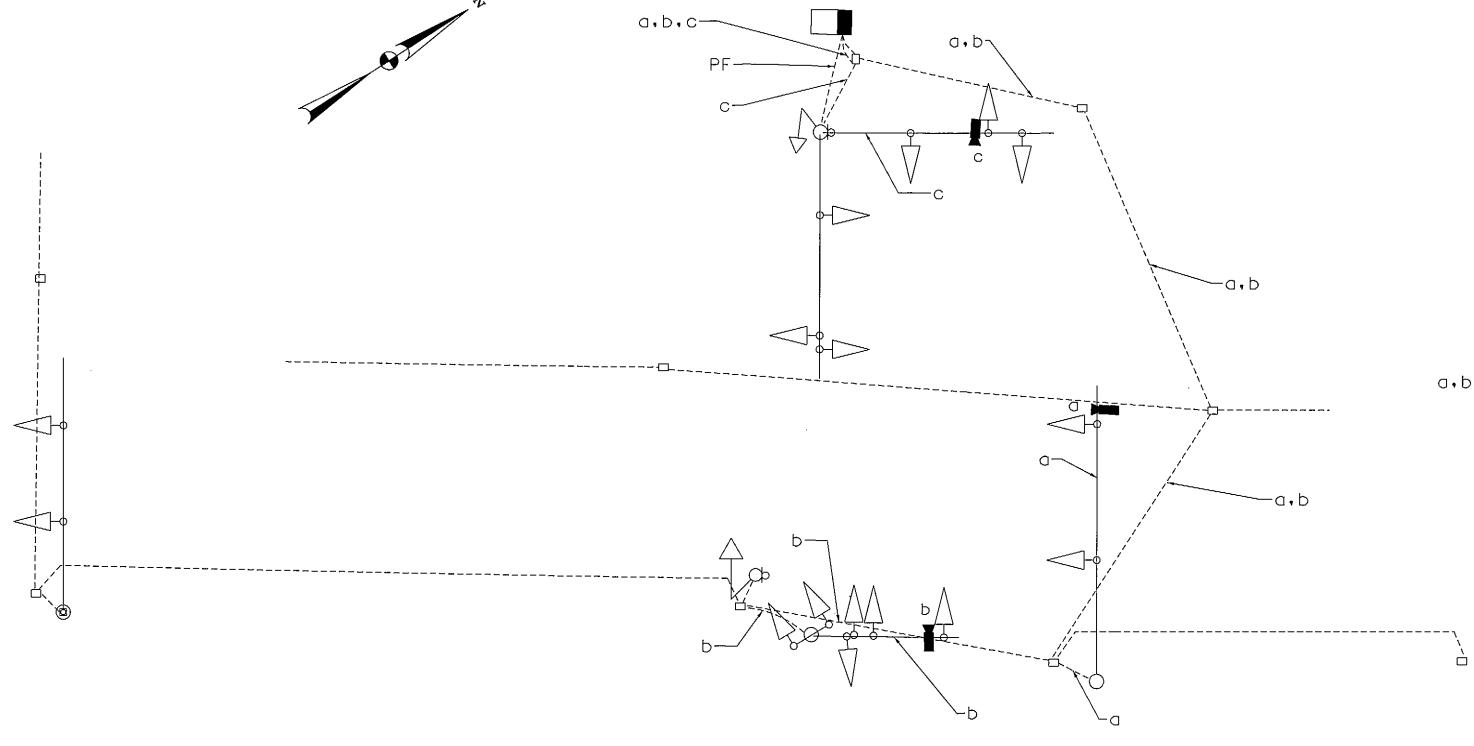
PHASE CHART

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 29 R (Y-R) R (R) R (R

| PHASE 1 AND 6 | DARK | DARK | 4 -G∕G | ← G⁄G | G | R | R | R | R | R | R | R | R | R | R | DW | DW | DARK A |
|--------------------------------|------|------|---------------|--------------|------|------|------|------------------|-----------------|------|--------|---------------|-----------------|------------------|------|------------|-------|-----------------|
| 1 AND 6 CHANGE | DARK | DARK | ← Y/G | ← Y/G | G | R | R | R | R | R | R | R | R | R | R | DW | DW | DARK T |
| PHASE 2 AND 6 | DARK | DARK | G | G | G | G | G | R | R | R | R | R | R | R | R | DW | DW | DARK |
| 2 AND 6 CHANGE | DARK | DARK | Υ | Υ | Υ | Υ | Υ | R | R | R | R | R | R | R | R | DW | DW | DARK |
| PHASE 3 | DARK | DARK | R | R | R | R | R | R | R | R | R | R | G ← G | G 4 -G | G | DW | DW | DARK + |
| 3 CHANGE | DARK | DARK | R | R | R | R | R | R | R | R | R | R | Υ | Y | Υ | DW | DW | DARK -1 |
| PHASE 4 | DARK | DARK | R | R | R | R | R | G +G | G ← G | G | R | R | R | R | R | DW | DW | DARK H |
| 4 CHANGE | DARK | DARK | R | R | R | R | R | Y | Υ | Υ | R | R | R | R | R | DW | DW | DARK - V |
| PHASE 4 ALT | DARK | DARK | R | R | R | R | R | G (G | G 4 G | G | R | R | R | R | R | WK | WK | DARK PI |
| PED CLEARANCE | DARK | DARK | R | R | R | R | R | ъĢ | ტ ე | G | R | R | R | R | R | FL⁄DW | FL⁄DW | |
| PHASE 4 ALT CHANGE | DARK | DARK | R | R | R | R | R | Y | Υ | Υ | R | R | R | R | R | DW | DW | DARK - SV |
| ACTIVATE EMERGENCY PRE-EMPTION | Υ | Υ | SEE NOTE 1 | | | | | | R | R | SE | SEE NOTE 1 DW | | | DW | SEE NOTE 3 | | |
| EMERGENCY PRE-EMPTION | R | R | ← G/G | ← G⁄G | G | R | R | R | R | R | 8"FL/Y | 8"FL/Y | R | R | R | DW | DW | SEE \\ NOTE 3 \ |
| EMERGENCY PRE-EMPTION CHANGE | R | R | ← Y/G | ← Y/G | G | R | R | R | R | R | 12"Y | 12"Y | R | R | R | DW | DW | SEE 1 |
| FLASHING OPERATION | DARK | DARK | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | | + 4 |

1. DEPENDING ON THE OPERATING PHASES AT ACTIVATION, ALL PHASES OTHER THAN 1 AND 6 WILL GO TO PHASE CHANGE. 2. IT IS ASSUMED THAT AFTER EMERGENCY PRE-EMPTION CHANGE THE CONTROLLER WILL RETURN TO PHASE 2 AND 6. 3. ILLUMINATE NO RIGHT TURN FIBER OPTIC SIGN

<u>WIRING</u> DIAGRAM



WIRING KEY

VIDEO DETECTION CABLE

EXISTING POWER FEED

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY

TRAFFIC ENGINEERING DESIGN DIVISION MD 528 (PHILADELPHIA AVENUE) @ 15TH ST TRAFFIC SIGNAL MODIFICATION

GENERAL INFORMATION SHEET SCALE N.T.S. ADVERTISED DATE 01-2009 CONTRACT NO. AXI395185 COUNTY WORCESTER LOGMILE ____23052807.57 TIMS NO. _____J517 SHEET NO. 2 OF 2 TS NO. 57IJ GI DRAWING

BRUDIS & ASSOCIATES, INC. 9220 Rumsey Road; Suite 110

PLOTTED: Tuesday, January 13, 2009 AT 01:36 PM FILE: P:\04-005 Signals\MD 528 @ 12th, 15th & 17th\Drawings\CADD\Working\pSG-N000_MD528&15th_ST.dgn

Consulting Engineers

Columbia, Maryland 21045 Phone 410-884-3607